

DEPARTMENT of ENVIRONMENTAL SERVICES  
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: GREENOUGH POND, LITTLE	Lake Area (ha):	20.03
Town: WENTWORTHS LOCATION	Maximum depth (m):	3.0
County: Coos	Mean depth (m):	2.0
River Basin: Androscoggin	Volume (m <sup>3</sup> ):	409500
Latitude: 44°50'20" N	Relative depth:	0.6
Longitude: 71°08'00" W	Shore configuration:	---
Elevation (ft): 1458	Areal water load (m/yr):	7.87
Shore length (m): 1400	Flushing rate (yr <sup>-1</sup> ):	3.80
Watershed area (ha): 247.7	P retention coeff.:	0.58
% watershed ponded: 0.0	Lake type:	natural

BIOLOGICAL:

	6 March 1990	26 July 1989
DOM. PHYTOPLANKTON (% TOTAL) #1	VERY SPARSE - MOSTLY	DINOBRYON 45%
#2	MICROCYSTIS	GLOEOCYSTIS 20%
#3		STAUSTRUM/ANABAENA 10%
PHYTOPLANKTON ABUNDANCE (cells/mL)		1640.0
CHLOROPHYLL-A (µg/L)		2.73
DOM. ZOOPLANKTON (% TOTAL) #1	KELICOTTIA 56%	CALANOID COPEPOD 42%
#2	NAUPLIUS LARVA 17%	DAPHNIA 28%
#3	CALANOID COPEPOD 17%	KELICOTTIA 22%
ROTIFERS/LITER	131	51
MICROCRUSTACEA/LITER	70	149
ZOOPLANKTON ABUNDANCE (#/L)	201	182
VASCULAR PLANT ABUNDANCE		Sparse
SECCHI DISK TRANSPARENCY (m)		2.3
BOTTOM DISSOLVED OXYGEN (mg/L)	5.9	6.2
BACTERIA (fecal col., #/100 ml) #1		< 10
#2		
#3		

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None  
Hypolimnion volume (m<sup>3</sup>): None

CHEMICAL:Lake: GREENOUGH POND, LITTLE  
Town: WENTWORTHS LOCATION

	6 March 1990		26 July 1989		
DEPTH (m)	1.0	2.0	1.0		2.5
pH (units)	6.0	5.9	6.7		6.6
A.N.C. (Alkalinity)	3.4	5.2	4.7		4.8
NITRATE NITROGEN	0.27	0.25	< 0.05		< 0.05
TOTAL KJELDAHL NITROGEN	0.28	0.31	0.17		0.17
TOTAL PHOSPHORUS	0.006	0.011	0.011		0.012
CONDUCTIVITY ( $\mu$ mhos/cm)	31.1	31.9	24.2		24.1
APPARENT COLOR (cpu)	22	22			
MAGNESIUM			0.41		
CALCIUM			4.0		
SODIUM			< 3.0		
POTASSIUM			0.40		
CHLORIDE	< 2	< 2	< 2		< 2
SULFATE	5	4	4		4
TN : TP	92	51	15		14
CALCITE SATURATION INDEX			3.3		

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1989

D.O. S.D. PLANT CHL TOTAL CLASS

**	3	0	0	3	Oligo.
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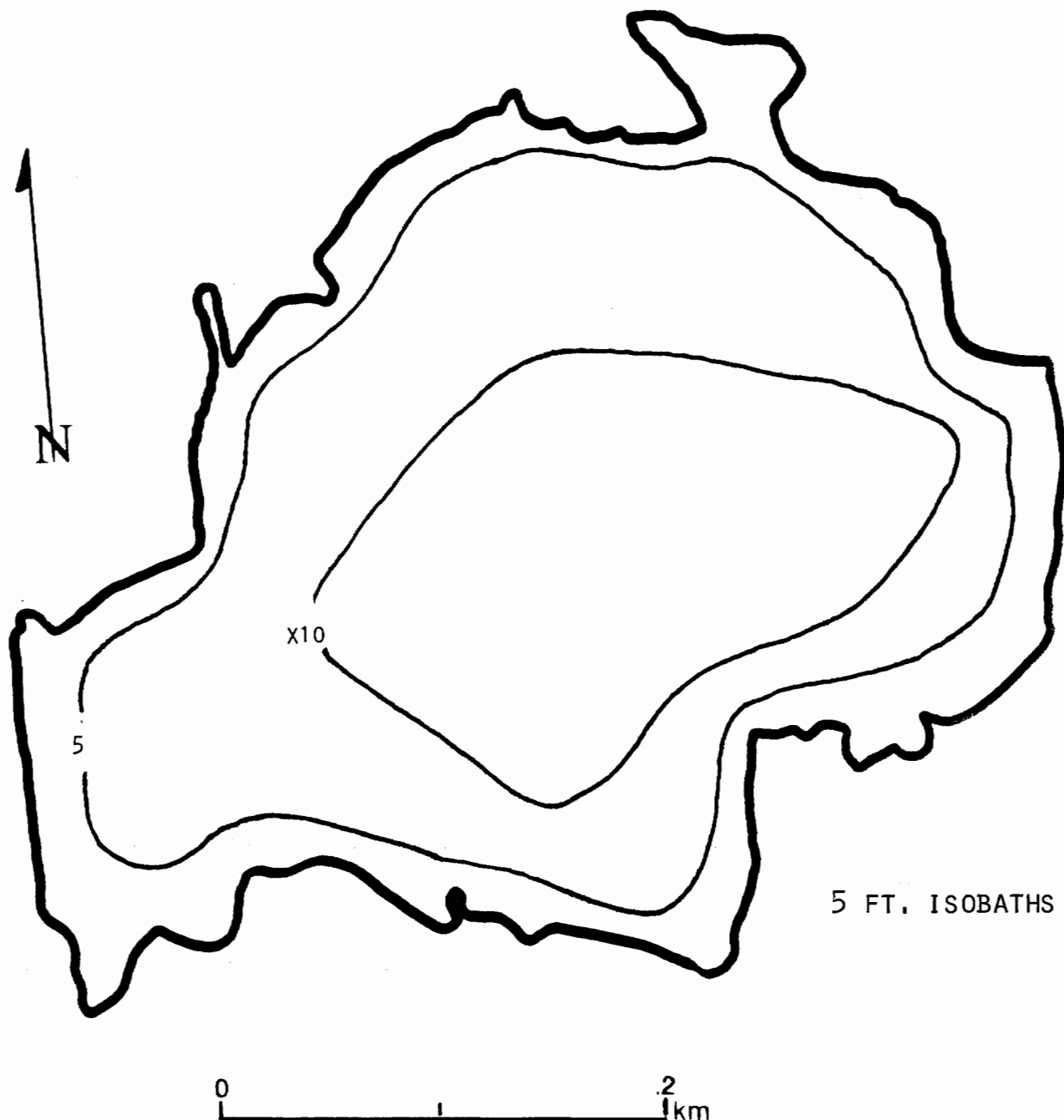
COMMENTS:

1. No public access. Rough, 4-wheel drive road from Rt. 16 passes by the pond. The road is subject to gate closure by the paper company owning the road.
2. No cottages were on pond.
3. Five rowboats were chained to trees at the pond, evidently used by local fishermen.
4. Dominant whole-water phytoplankton were colonies of small blue-green cells (30%) and Merismopedia (25%).

# Greenough Pond (little)

Wentworths Location

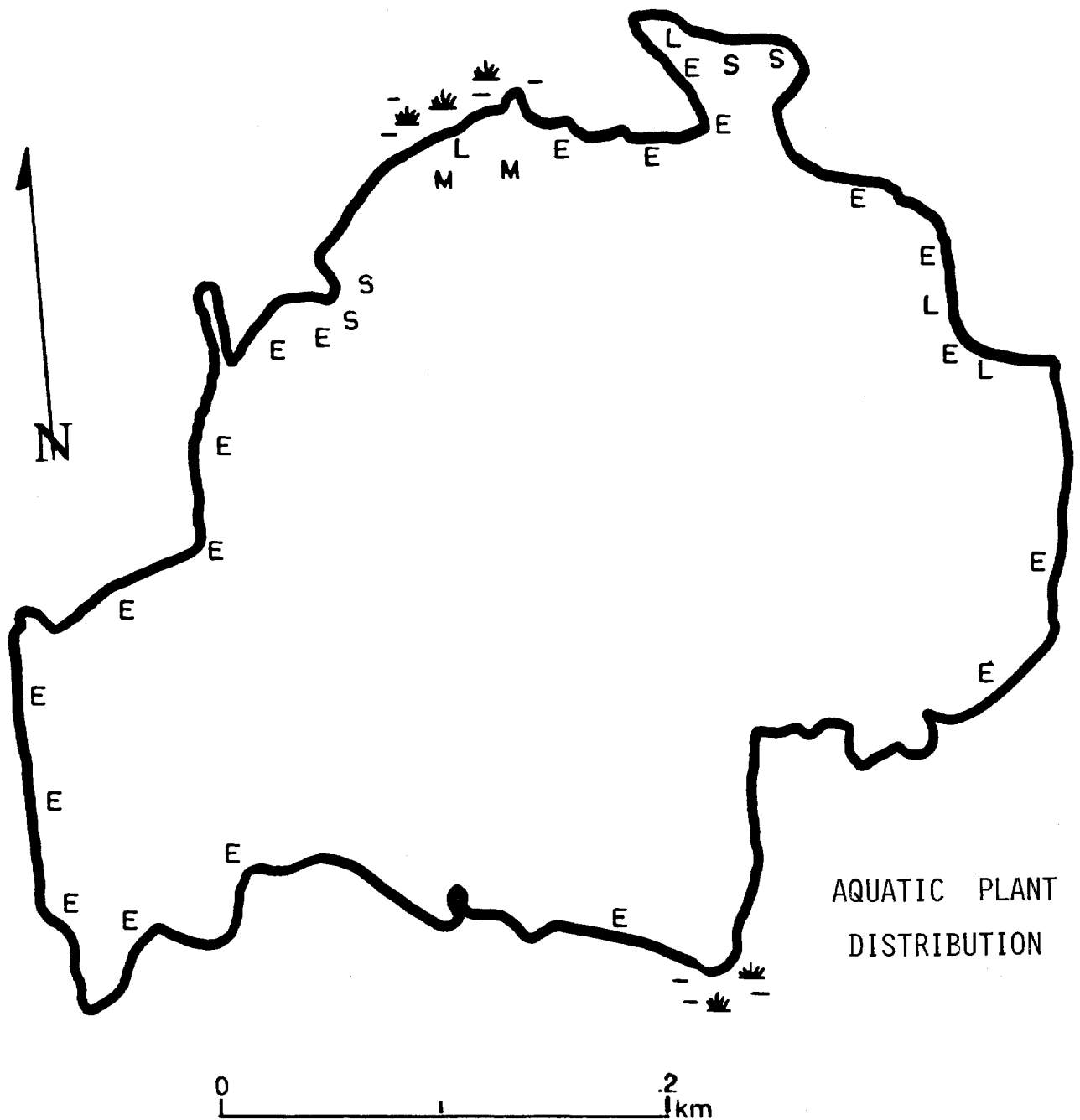
ROUGH BATHYMETRIC CHART  
SOUNDED BY FATHOMETER  
DES - 1989





# Greenough Pond (little)

Wentworths Location



## AQUATIC PLANT SURVEY

LAKE: GREENOUGH POND, LITTLE

TOWN: WENTWORTHS LOCATION DATE: 07/26/89

[illegible]

OVERALL ABUNDANCE: Sparse

GENERAL OBSERVATIONS:

1. Lake level was down about 1.5 feet at the time of the summer sampling.